

This listing of claims will replace all prior versions, and listings, of claims in the application:

The Status of the Claims

1. (Currently Amended): A method for manufacturing a semiconductor device, the method comprising:

successively depositing gate insulating layer forming material and gate electrode forming material on a semiconductor substrate;

patterning the gate insulating layer forming material and the gate electrode forming material to form a gate insulating layer and a gate electrode;

performing a nitrogen ion-implantation to a front face of the substrate and the gate electrode; and

annealing the substrate so as to form a re-oxidation layer that has different thickness on the sidewalls of the gate electrode ~~and~~ than on the substrate.

2. (Currently Amended): A method for manufacturing a semiconductor device as claimed in claim 1, wherein ~~energy of the~~ nitrogen ion implantation is performed at an energy of 10 to 50keV.

3. (Original): A method for manufacturing a semiconductor device as claimed in claim 1, wherein dose of nitrogen ion implantation is 10^{14} to 5×10^{15} atoms/cm².

4. (Original): A method for manufacturing a semiconductor device as claimed in claim 1, wherein an angle of nitrogen ion implantation is vertical to the substrate.

5. (Currently Amended): A method for manufacturing a semiconductor device as claimed in claim 4, wherein the ~~energy of~~ nitrogen ion implantation is performed at an energy of 10 to 50keV.

6. (Original): A method for manufacturing a semiconductor device as claimed in claim 4, wherein dose of nitrogen ion implantation is 10^{14} to 5×10^{15} atoms/cm².

7. (New): A method for manufacturing a semiconductor device as claimed in claim 1, further comprising forming source/drain regions after annealing of the substrate.

8. (New) A method for manufacturing a semiconductor device, the method comprising:

successively depositing gate insulating layer forming material and gate electrode forming material on a semiconductor substrate;

patterning the gate insulating layer forming material and the gate electrode forming material to form a gate insulating layer and a gate electrode;

performing a nitrogen ion-implantation to a front face of the substrate and the gate electrode;

annealing the substrate so as to form a re-oxidation layer that has different thickness on the sidewalls of the gate electrode than on the substrate; and

forming LDD structure after annealing the substrate.

9. (New): The method for manufacturing a semiconductor device as claimed in claim 8, wherein the nitrogen ion-implantation is performed at an energy of 10 to 50keV.

10. (New): The method for manufacturing a semiconductor device as claimed in claim 8, wherein dose of nitrogen ion implantation is 10^{14} to 5×10^{15} atoms/cm².

11. (New): A method for manufacturing a semiconductor device as claimed in claim 8, wherein an angle of nitrogen ion implantation is vertical to the substrate.

12. (New): A method for manufacturing a semiconductor device as claimed in claim 11, wherein the nitrogen ion-implantation is performed at an energy of 10 to 50keV.

13. (New): A method for manufacturing a semiconductor device as claimed in claim 11, wherein dose of nitrogen ion implantation is 10^{14} to 5×10^{15} atoms/cm².